

EXECUTIVE OFFICER SUMMARY REPORT  
March 9, 2005

ITEM: 5

SUBJECT: NPDES PERMIT RENEWALS: SOUTHERN CALIFORNIA  
EDISON, SAN ONOFRE NUCLEAR GENERATING STATION  
(Hashim Navrozali):

- a. WASTE DISCHARGE REQUIREMENTS FOR THE  
SOUTHERN CALIFORNIA EDISON, SAN ONOFRE  
NUCLEAR GENERATING STATION, UNIT 2, SAN  
DIEGO COUNTY (TENTATIVE ORDER NO. R9-2005-  
0005, NPDES PERMIT NO. CA0108073)
- b. WASTE DISCHARGE REQUIREMENTS FOR THE  
SOUTHERN CALIFORNIA EDISON, SAN ONOFRE  
NUCLEAR GENERATING STATION, UNIT 3, SAN  
DIEGO COUNTY (TENTATIVE ORDER NO. R9-2005-  
0006, NPDES PERMIT NO. CA0108181)

PURPOSE: To hold a public hearing and receive comments from interested parties regarding the tentative NPDES renewal permits for the Southern California Edison (SCE), San Onofre Nuclear Generating Station (SONGS), Units 2 and 3.

PUBLIC NOTICE: The NPDES permits hearing notice was published in the San Diego Union-Tribune and Orange County Register newspapers on January 28, 2005 for the Regional Board meeting scheduled for March 9, 2005. Copies of the tentative Orders were mailed on January 28, 2005 to the discharger and to all known interested parties and agencies. Copies were made available for public review at the Regional Board office on January 28, 2005. The tentative Orders were also posted on the Regional Board's website on January 28, 2005.

These actions served as the 30-day official public notification, as required by Title 40, Section 124.10 of the Code of Federal Regulations.

In the January 28, 2005 public notice, the public was encouraged to send written comments to the Regional Board office by February 25, 2005. The notice also indicated that written comments received after March 2, 2005 would not be provided to the Regional Board members prior to the hearing.

The Regional Board subsequently determined that it would be appropriate to provide additional time to the public for written comments on the tentative Orders. The written comments are now due by 5:00 p.m. on March 9, 2005. The discharger and all known interested parties were notified of the new date for written comments. Furthermore, a public notice regarding the extension in the written comments period was published in the San Diego Union-Tribune and Orange County Register newspapers on February 23, 2005.

After the close of the public comment period on March 9, 2005, the Regional Board will schedule a subsequent date for deliberating on all testimony and making a decision on the adoption of tentative Order Nos. R9-2005-0005 and R9-2005-0006. Staff will be preparing a response to comments document to address the written comments received and will be providing the document to Regional Board members and the public after the March 9, 2005 hearing. An Errata Sheet to the tentative Orders, if needed, will also be compiled. No additional written or oral testimony will be accepted after March 9, 2005, unless the Regional Board reopens the public comment period.

As of February 24, 2004, one comment letter has been received (see Attachment 8). Additional written comments received will be provided to Regional Board members in the supplemental agenda mailing, prior to the March 9, 2005 hearing.

#### DISCUSSION:

Tentative Order Nos. R9-2005-0005 and R9-2005-0006 (Waste Discharge Requirements for Southern California Edison, San Onofre Nuclear Generating Station, Units 2 and 3, San Diego County) renew and update NPDES Permit Nos. CA0108073 and CA0108181 and supersedes the current NPDES permits, Order Nos. 99-47 and 99-48, in their entirety.

The waste discharge requirements and monitoring requirements contained in both tentative Orders are virtually identical since both Units 2 and 3 have the same electrical outputs (i.e. 1,087 MW), maximum discharge flow-rates (i.e. 1,287 mgd), and constituents in their effluent. Effluent from both Units consists primarily of once-through cooling water, with small volumes of other in-plant waste streams. The effluent from Units 2 and 3 is discharged to the Pacific Ocean via individual ocean outfalls (i.e. Outfalls 002 and 003).

The waste discharge requirements (including effluent and receiving water limitations, prohibitions, and monitoring requirements) contained in the tentative Orders are based on the federal NPDES regulations, the federal technological based

standards for steam electric power plants (40 CFR 123), the provisions of Sections 316(a) and 316(b) of the Clean Water Act (CWA) (power plant intake structure and thermal discharge regulations), the State Thermal Plan, the Basin Plan, and the 2001 California Ocean Plan.

SONGS Unit 1 is subject to waste discharge requirements established by Order No. 2000-04. Currently SCE is permitted to discharge the effluent from Unit 1 to Outfall 001 or route the effluent to Outfalls 002 or 003. SCE has reported it will terminate the use of the Outfall 001 sometime in 2005. At that time all effluent from Unit 1 will be routed exclusively to Outfalls 002 or 003. The Regional Board has determined that it would be appropriate not to renew the NPDES permit for Unit 1 when it expires on February 9, 2005. Order No. 2000-04 will instead continue to be enforced administratively until such time that the Discharger notifies the Regional Board that it has terminated the use of Outfall 001. The Regional Board will consider rescinding Order No. 2000-04 at that time.

Tentative Order Nos. R9-2005-0005 and R9-2005-0006 both acknowledge the impending termination of flows from Unit 1 to Outfall 001 and the routing of flows from Unit 1 to Outfalls 002 or 003. Both tentative Orders are structured to account for effluent limitations and monitoring requirements as a result of the routing of Unit 1 flows to Outfalls 002 or 003.

The effluent limitations for toxics and discharge prohibitions in the tentative Orders have been derived from the 2001 California Ocean Plan. The effluent limitations in the existing Orders for Units 2 and 3 (i.e. Order Nos. 99-47 and 99-48) were based on the 1997 version of the Ocean Plan. The Regional Board, in consultation with the SWRCB staff, has concluded that an acute toxicity limitation is not required for discharges from Outfalls 002 and 003. The tentative Orders, however, do include chronic toxicity limitations, which are consistent with 2001 Ocean Plan requirements.

Most of the effluent limitations, prohibitions, or monitoring requirements contained in the tentative Orders are the same or more stringent than those in Order Nos. 99-47 and 99-48.

See attached Staff Report (Attachment 2) dated February 24, 2005 for a more detailed discussion of this Item.

## KEY ISSUES:

1. The diversion of effluent from Unit 1 to the Unit 2 or 3 Outfalls (i.e. Outfalls 002 or 003).
2. The requirement for the Discharger to perform a *Comprehensive Demonstration Study* to demonstrate that Units 2 and 3 meet the technology and/or restoration compliance alternatives of the CWA Section 316(b) (Intake Structures) *Phase II* rule.
3. The removal of acute toxicity effluent limitations (pursuant to 2001 Ocean Plan provisions).
4. The discontinuation of the requirement for the Discharger to conduct periodic bacterial monitoring of receiving waters.
5. The discontinuation of the requirement for the Discharger to conduct periodic offshore transmissivity monitoring.

See attached Staff Report (Attachment 2) dated February 24, 2005 for a detailed discussion of the Key Issues.

## LEGAL CONCERNS:

None.

SUPPORTING  
DOCUMENTS:

1. Location map.
2. Staff Report dated February 24, 2005.
3. Tentative Order No. R9-2005-0005 with Monitoring and Reporting Program.
4. Tentative Order No. R9-2005-0006 with Monitoring and Reporting Program.
5. Fact Sheet for tentative Order Nos. R9-2005-0005 and R9-2005-0006.
6. Copy of transmittal letter for tentative Orders, dated January, 8 2005.
7. Affidavit of Publication for newspaper public notices in the San Diego Union Tribune and Orange County Register newspapers, dated January 28, 2005.
8. Copy of Mr. Sheldon Plotkin's comment letter, dated February 1, 2005.

COMPLIANCE  
RECORD:

Monitoring of the low volume waste from the Unit 2 Blowdown Processing Sump (BPS), on February 5, 2001, indicated an oil and grease value of 27.5 mg/l. This exceeded the instantaneous maximum oil and grease discharge limitation of 20 mg/l. This constituted a violation of Order No. 99-47. The monthly average oil and grease value for February 2001 from the Unit 2 BPS was 17.0 mg/l. This exceeded the monthly average grease and oil discharge limitation of 15 mg/l. This also constituted a violation of Order No. 99-47. A staff enforcement letter was subsequently issued to SCE on March 26, 2004, noting the violations.

An intrusion of red sea grass and mud clogged the traveling screens at Unit 3 on June 6, 2004. This resulted in very high differential circulating water pressure, necessitating a manual shut down of Unit 3. During the shut down process, the maximum delta T (incremental temperature of discharge above that of ambient receiving water) for Unit 3 exceeded 25 degrees F, for a period of approximately eight minutes. This constituted a violation of Order No. 99-48.

According to Order No. 99-48, *Discharge Specification, B.8*, the delta T for Unit 3 shall not exceed 25 degrees F at anytime. SCE failed to maintain a delta T of 25 degree F or less for Unit 3, during an eight-minute period on June 6, 2004. A Notice of Violation was issued to SCE on August 19, 2004, noting the violation. No further enforcement action was taken regarding this violation.

No additional effluent limitation violations of Order Nos. 99-47 or 99-48 have been noted in the last five years.

**SIGNIFICANT  
CHANGES:**

See attached Staff Report (Attachment 2) dated February 24, 2005 for a summary of significant changes and new requirements that have incorporated into tentative Order Nos. R9-2005-0005 and R9-2005-0006, with respect to the current NPDES permits (i.e. Order Nos. 99-47 and 99-48):

**RECOMMENDATION:**

The Regional Board should close the period to receive oral and written testimony regarding tentative Order Nos. R9-2005-0005 and R9-2005-0006 at its March 9, 2005 hearing. The Regional Board should deliberate on all testimony received and make a decision regarding adoption of the tentative Orders at its April 2005 hearing.